

Notice of Allowability

Application No.

10/817,128

Applicant(s)

CIOFFI ET AL.

Examiner

Ayal I. Sharon

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After Final Amendment filed 6/19/07.
2. ☒ The allowed claim(s) is/are 28-32 and 49-61.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>3/3/07</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Introduction

1. Claims 28-32 and 49-61 of U.S. Application 10/817,128, originally filed on 04/02/2004 are currently pending.
2. In the amendment filed 6/19/2007, claims 28, 30, and 32 have been amended. Claims 1-27 and 33-48 have been cancelled. Claims 49-61 are new.

Examiner's Statement of Reasons for Allowance

3. Claims 28-32 and 49-61 are allowed.
4. The following is an examiner's statement of reasons for allowance for claims 28-32 and 49-61.
5. The prior art referred to in this Reasons for Allowance is as follows:
 - a. U.S. PG-PUB 2003/0086514 to Ginis et al. ("**Ginis**").
 - b. International Telecommunication Union, "ITU-T Recommendation G.993.2." Study Group 15, TD 168 (PLEN/15). May 16-27, 2005. pp.1-14, 84-94, and 158-161. ("**ITU Recommendation**").
6. The Examiner previously indicated in the Final Office Action, dated 4/19/2007, that Claims 28-32 contained allowable subject matter. The Examiner indicated that the cited prior art (Ginis, and ITU Recommendation) did not expressly teach

the claimed steps in claim 28 for calculating the mean-square-error (MSE) noise of a line in a Digital Subscriber Line (DSL) system.

7. Neither Ginis nor ITU Recommendation expressly teach the steps claimed in independent claim 28.
8. Moreover, in regards to ITU Recommendation, while it repeatedly mentions PSD Masks and Hlog (see pp.85, 87, 91, 158-161, and especially pp.92-94), it does not expressly teach the claimed steps. Moreover, it does not qualify as prior art due to its May 2005 date. In addition, the footnote on p.1 of ITU Recommendation indicates that it was not intended for publication.
9. The claims 28-32 were previously objected to because of minor informalities. In the amendment filed 6/19/2007, the applicants have amended the claims to define the acronyms used in the claims.
10. Dependent claims 29-32 and 49 are allowable since they depend from allowable claim 28, and no longer contain objectionable informalities. (Claim 49 was added in order resolve the objected-to multiple dependent form of previously objected-to claim 32).
11. New claims 50-55 and 56-61 are systems claims and computer program product claims that are commensurate in scope to allowable claims 28-32 and 49.
12. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ayal I. Sharon whose telephone number is (571) 272-3714. The examiner can normally be reached on Monday through Thursday, and the first Friday of a biweek, 8:30 am – 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached at (571) 272-3753.

Any response to this office action should be faxed to (571) 273-8300, or mailed to:

USPTO
P.O. Box 1450
Alexandria, VA 22313-1450

or hand carried to:

USPTO
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2100 Receptionist, whose telephone number is (571) 272-2100.

Ayal I. Sharon
Art Unit 2123
June 25, 2007



PAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100